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## **A Penny for Your Thoughts : Monetary Incentives Improve Response Rates for Company-Sponsored Employee Surveys**

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*Organizational Research Methods* 2007 10: 225

DOI: 10.1177/1094428106294687

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# A Penny for Your Thoughts

## Monetary Incentives Improve Response Rates for Company-Sponsored Employee Surveys

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Two studies were conducted to assess the extent to which prepaid monetary incentives increase response rates to company-sponsored employee surveys. The first study indicated that providing a prepaid monetary incentive to a randomly selected group of employees from among a sample of 7,268 employees increased response rates from 31.7% to 43.5%. A second study based on 4,925 employees from another company replicated this finding and tested for effects of novelty and incentive size. Although response rates in the second study were significantly higher for employees who received an incentive (24.9%) compared with those who did not receive an incentive (20.8%), no significant effects were found for novelty or incentive size. The implications for using incentives to increase response rates in company-based surveys are discussed.

**Keywords:** *response rates; employee surveys; incentives; survey techniques; nonresponse*

Maximizing survey response rates is a universal concern for survey researchers and practitioners. Responses obtained from only a portion of a sample may not accurately represent the full sample because of problems such as selective returns and volunteer bias (Fowler, 1984; Roth & BeVier, 1998). As a consequence, organizations may make significant and costly mistakes when making employee survey-driven improvements in company policies and procedures based on responses from inadequate or biased samples. Identifying cost-effective methods to maximize employee response rates could meaningfully reduce such errors.

Survey researchers have effectively used a variety of techniques, including monetary incentives, to improve response rates. Some empirical work has identified the efficacy of a variety of methods for increasing response rates among public surveys, and to a much lesser degree among company-sponsored employee surveys. In particular, monetary incentives have been found to be quite effective for public surveys (Church, 1993; Hopkins &

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**Authors' Note:** The authors would like to thank Michael Campion, Michelle Donovan, and Greg Robinson for their comments and assistance with earlier versions of this article.

Gullickson, 1993) but have been almost completely ignored for use with company-sponsored employee surveys (Roth & BeVier, 1998).

Obviously, employees, unlike respondents to public opinion surveys, are receiving a salary from the organization that is asking them to complete the survey. The employee-employer relationship is complicated by actual and perceived expectations and obligations (Rousseau, 1995). These perceptions may influence employees' motivations to respond to company-sponsored surveys. For example, Rogelberg, Luong, Sederburg, and Cristol (2000) found that employees who were very committed to their organizations considered completing an organizational survey to be the obligation of any good company citizen. On the other hand, employees who are experiencing low organizational commitment may not want to bother putting in the extra effort that completing a survey requires. Rogelberg et al. (2000) also pointed out that employees who do not believe that the organization will handle the survey data responsibly (e.g., maintaining confidentiality or acting on the data) may choose not to respond. Furthermore, the authors suggest that response facilitation techniques (e.g., prepaid monetary incentives) are not likely to influence individuals who purposely withhold their participation.

Oversurveying of employees has been cited as a possible cause of low response rates in many business organizations (Saari, 1998). Employees in these organizations may view surveys as "junk mail." Once surveys start to be perceived as junk mail, inducements such as prepaid monetary incentives may become necessary just to pique the attention of the respondents.

## Empirical Support for Incentives

A large body of research exists on the impact of monetary incentives on response rates in mail questionnaires. Many researchers have reported that the inclusion of a monetary incentive increased response rates (e.g., Church, 1993; Kanuk & Berenson, 1975; Warriner, Goyder, Gjertsen, Hohner, & McSpurren, 1996; Yu & Cooper, 1983), whereas a few earlier studies found no effect (Bevis, 1948; Kephart & Bressler, 1958; Wotruba, 1966). Several meta-analyses have recently confirmed the effect of incentives for increasing response rates across a large number of studies (e.g. Church, 1993; Hopkins & Gullickson's, 1993; Warriner et al., 1996). For example, in a meta-analysis of 38 public opinion studies, Church (1993) estimated that the average absolute increase in response rates for prepaid monetary incentives was 19.1 percentage points. This 19% difference in response rates was confirmed by Hopkins and Gullickson's (1993) meta-analysis of 62 studies in which the inflationary value of the dollar was controlled for in examining effects.

Most of the studies on response rates have come from the public opinion literature and have involved consumer attitude questionnaires. In their review of the literature, Roth and BeVier (1998) found "relatively little analysis of response rates in HRM/OB research" (p. 98). On the basis of the available data, these authors concluded that follow-ups and advance notice had a strong relationship with response rates but that a great deal of research is needed to better understand response rates of employees in organizational settings. In examining these studies "the dominant methodology is to examine mail-out surveys to consumers, rather than industrial populations" (Roth & BeVier, 1998, p. 98).

There has been a particular absence of literature addressing whether the findings on monetary incentives apply to company-sponsored employee surveys such as job satisfaction

measures or training needs questionnaires. Roth and BeVier (1998) suggested that the use of a monetary incentive is one of the key variables requiring additional examination. Within their sample, only 10 studies (4.5%) used monetary incentives. According to the authors, "The lack of studies using incentives in HRM/OB also makes it difficult to theorize about the relationship of this variable to response rates" (Roth & BeVier, 1998, p. 103). This dearth of population-specific empirical data regarding the use of incentives has forced researchers to assume the generalizability of findings from public opinion studies to industrial samples rather than relying on data to support their use.

## Theoretical Background

### *Social Exchange*

Some authors argue that incentives increase respondents' motivation to complete surveys via social exchange theory (e.g., Tedin & Hofstetter, 1982). Social exchange theory postulates that human behavior is motivated by psychological returns and psychological costs associated with a behavior (Greenberg, 1980). If an incentive is included with the survey, the recipient may feel guilty if he or she does not return it while keeping the money. So, returning the survey may decrease the psychological costs (guilt) of not returning the survey, thus increasing the likelihood that the survey would be returned completed.

### *Norm of Reciprocity*

Another rationale for the effect of incentives is the norm of reciprocity (e.g., Gouldner, 1960; Komorita, Hilty, & Parks, 1991; Whatley, Webster, Smith, & Rhodes, 1999), the existence of a strong norm leading individuals to repay favors freely given. The norm of reciprocity comes into play with incentives specifically because they are prepaid. This explanation for the efficacy of incentives has been supported with studies that have found promised incentives (in exchange for a returned survey) have no effect on response rate (Church, 1993). Several authors have suggested that the lack of an effect for promised incentives, combined with the strong effects for prepaid incentives, supports the reciprocity explanation (Fox, Crask, & Kim, 1988; Porter, 2004). These authors point out that that a promised incentive makes explicit the exchange of a completed survey for a specified payment. A \$1 promised payment (or even a \$50 payment in the case of James & Bolstein, 1992) is clearly not an adequate exchange for the amount of time invested in completing the survey, hence highlighting the exchange nature of the incentive by promising a future payment is not effective. On the other hand, when a dollar bill is included in a survey packet, a favor is being freely given to the survey recipient, and as a result, he or she feels compelled to reciprocate that favor by completing and returning the survey.

### *Symbolism*

Some authors (e.g., Furse & Stewart, 1982; Hackler & Bourgette, 1973; Linsky, 1975; Pressley & Tullar, 1977; Wotruba, 1966) argue that the motivating power of the prepaid incentive is symbolic. For example, a survey that included a \$1 incentive might be judged as more important than one without an incentive. Furthermore, larger incentives presumably represent greater importance, suggesting that incentives of greater value should produce

larger response rates than incentives of lesser value. Some data support the effectiveness of larger valued incentives (e.g., Warriner et al., 1996); however, at least one meta-analysis of incentive size suggests that “the systematic relationship between the marginal increase in response rate and the size of the incentive indicates that diminishing returns are quickly experienced” (Fox et al., 1988, pp. 485-486).

### *Novelty*

Another possibility for the effectiveness of incentives relates to the fact that respondents likely do not expect to receive an incentive in a mailed survey. Respondents may simply be surprised to find an incentive in their survey packet, and consequently, they may attend to the survey more than they might have without the incentive. Some persuasion research supports the notion that survey response rates may be influenced by the novelty of the incentive. For example, a study on mindful persuasion by Santos, Leve, and Pratkanis (1994) demonstrated the persuasive power of the “Pique Technique.” Specifically, researchers found that persuasion was enhanced by making a request in an unusual or novel manner so that the target’s interest was piqued. The Pique Technique was demonstrated in experiments where passers-by on a local municipal wharf were approached by a confederate panhandler who made one of two requests: the novel request “Can you spare 17 cents (or 37 cents)?” and the typical request, “Can you spare a quarter (or any change)?” Participants in the novel conditions were almost 60% more likely to have given money than those who received the typical plea (Santos et al., 1994). Furthermore, the authors were able to replicate the findings in laboratory settings (Santos et al., 1994). Santos and colleagues stated that the Pique Technique catches people off guard and forces them to focus on the request. Making unusual appeals is an effective way to draw people out of their routine tendency to dismiss or refuse requests (Santos et al., 1994). Thus, it seems plausible that the more novel the incentive is, the more likely it is to pique someone’s attention.

## **Research Questions**

Given the extremely strong empirical evidence, there is reason to believe that the effects of incentives on response rates in public surveys may generalize to company-sponsored employee surveys. On the other hand, because of the widely differing motivations and concerns about completing surveys among consumers as compared to employees of the organization sponsoring the survey, the question of generalizability remains an empirical uncertainty. For example, employees who complete surveys may be paid for the time it takes to fill out the survey, and the results of the survey are often designed to directly affect them (e.g., surveys of employee satisfaction, training needs, or 360-degree feedback). Participants in such employee surveys may already have more incentives to complete it than do participants in public attitude questionnaires. Nonetheless, employees may also be more concerned than consumers about potential reprisals caused by returning the survey. Finally, the complex employer-employee relationship may affect whether someone feels motivated or even obligated to complete the survey.

To explore the potential for using incentives in company-sponsored employee surveys, the following research questions were pursued:

1. To what extent do incentives increase response rates in company-sponsored employee surveys?
2. Are demographic variables such as age, race, sex, or company tenure related to response rates in company-sponsored employee surveys?

3. When incentives are used, does incentive value influence response rates in company-sponsored employee surveys?
4. When incentives are used, does the novelty of the incentive influence response rates in company-sponsored employee surveys?

Two studies were conducted to address these research questions. The first study was an attempt to test the extent to which a small prepaid incentive (\$1) included in a company-sponsored employee survey would increase response rates. Study 2 attempted to extend the findings from Study 1 to a different organization and also to determine the extent to which incentive size (\$1, \$.25, and \$.01) and the novelty of the incentive would influence the effect of the prepaid incentive on response rates. Both studies tested the use of incentives to increase response rates in company-sponsored employee surveys. The type of survey and the methodology employed to collect surveys were nearly identical in the two studies.

## **Study 1: Incentive vs. no incentive**

### **Method**

#### *Procedure*

A training needs analysis was conducted for a large international retailer headquartered in the United States. A primary tool for the needs analysis was a survey that was distributed to a random sample of 7,725 employees, including store managers and hourly associates. Surveys and a cover letter from the most senior HR executive were sent in an envelope imprinted with the company logo and address to participants at their work address via the U.S. Postal Service. The cover letter was printed on company letterhead and emphasized the importance of the survey for determining what training the company would provide employees in the coming year. Each survey packet also contained a postage-paid envelope in which to return the survey.

Three hundred thirteen of the participants were randomly selected to receive a \$1 bill along with the survey. The incentives were inserted loosely into the envelope unattached to any of the contents. On surveys with incentives enclosed, a one-inch-long, one-fourth-inch-wide yellow highlighter mark was placed within a half inch of both edges of the lower left corner of the back side of the survey. In addition, on surveys with incentives enclosed, one-fourth inch of the nonhighlighted corner at the bottom of the survey was cut off. Last, before shipping the surveys, researchers noted the six-digit code for all surveys that received incentives. Potential participants were given 10 days to return the survey. No comment was made in the cover letter about the enclosed incentives or the markings on the surveys. All employees were paid for their time while they completed the survey.

Sample size for the incentive group was determined using a power analysis in which it was assumed that if there was a difference, it was likely to be a moderate to small effect. The effect was estimated as a 20% difference in response rates between the groups. Hence, assuming a response rate of 40% for the no-incentive group, we wanted to be able to detect a difference with response rates of 32% or 48% for the other group. Using an alpha of .05, power of .80, a response rate of 40% for the nonincentive group, and a response rate of 32% for the incentive group, the analysis suggested a sample of 301 would be adequate to detect



effects. Twelve additional dollar bills were added to survey packets to account for the possibility that some of the surveys would be returned undeliverable. Hence, incentives were sent with a total of 313 surveys.

### *Survey*

A team composed of outside consultants and staff from the company's Organizational Effectiveness and Training groups developed the content for the surveys. The survey was administered (and results analyzed) by an outside consulting firm and was designed to assess the company's immediate and future training needs. All responses were confidential.

Survey content covered seven core training areas. These seven areas included product knowledge, sales and customer service, job skills, leadership, business knowledge, functional knowledge, and safety knowledge. Employees were asked questions regarding the extent to which they were proficient in each of the seven areas. Surveys were tailored to different levels of employees and contained both multiple-choice and open-ended questions. The survey for the managers contained 60 questions, and the survey for the rank-and-file employees contained 43 questions. Each survey contained a unique six-digit number on the bottom of both sides to facilitate data entry and also to link survey responses with a variety of demographic variables including sex, race, age, and tenure at the company. Hence, each survey was uniquely matched to each employee.

### *Participants*

Seven thousand three-hundred twenty-five employees were randomly chosen to participate in the survey with no preset stratifications. Thirty-seven surveys were returned undeliverable (all from the nonincentive group), and 20 surveys were never sent because of inadequate addresses. Of the possible 7,268 employees who were mailed a survey, a total of 2,338 employees returned completed surveys, yielding a total response rate of 32.2%.

The demographics of the random sample were highly representative of the organization as a whole in terms of function, organizational level, region, and individual demographics. Specifically, 69.5% of the 7,268 surveys were sent to men, and 30.5% went to women. The sample was 75% White, 11.3% African American, 10.3% Hispanic, 2.6% Asian/Pacific Islander, and .8% Native American. The mean age of the sample was 36.5 years ( $SD = 11.6$ ), and the mean tenure in months was 46.4 ( $SD = 47.1$ ).

## **Results**

Response rates for dollar, sex, race, age, and tenure categories are presented in Table 1. Chi-square statistics were used to compare response rates for various groups. As indicated in this table, employees who received the prepaid incentive were more likely to return their survey. Specifically, 43.5% of those who received a dollar returned the survey, compared to 31.7% of those who did not receive a dollar,  $\chi^2(1, N = 7,268) = 19.08, p < .001$ . Men and women were equally as likely to return completed surveys,  $\chi^2(1, N = 7,268) = 1.17, p > .05$ ; however, those of different races had different response rates,  $\chi^2(4, N = 6,809) = 89.76, p < .001$ . Point biserial correlations were used to assess the impact of age and tenure on response rates. Older employees were more likely to return their completed survey than

**Table 1**  
**Survey Response Rates by Incentive and Demographic Variables**

Independent Variable	Category	Response Rate (%)	Surveys Returned	Total <i>N</i>
Incentive	Yes	43.5	136	313
	No	31.7	2,202	6,955
Sex	Male	31.8	1,604	5,048
	Female	33.1	734	2,220
Race	White	35.8	1,830	5,108
	African American	21.3	164	770
	Hispanic	25.0	175	701
	Asian/Pacific Islander	27.3	48	176
	Native American	37.0	20	54
Age	< 25 years	28.8	417	1,448
	26-35 years	28.1	635	2,262
	36-45 years	33.5	666	1,989
	> 45 years	39.5	620	1,569
Tenure	< 1 year	29.1	608	2,086
	1-2 years	32.0	394	1,230
	2-5 years	34.3	622	1,816
	5-10 years	34.0	494	1,453
	> 10 years	32.2	220	683

younger employees ( $r = .09$ ,  $p < .01$ ), and tenure was unrelated to whether or not a survey was completed and returned ( $r = .02$ ,  $p > .05$ ).

To control for the effects of demographic variables on response rate increases observed in the incentive condition, a logistic regression was performed. Race (via dummy coding), sex, age, and tenure were used as control variables in the regression with the dollar incentive as an additional independent variable and whether or not the survey was returned as the dependent variable. Because Asians and Native Americans were so underrepresented in the sample compared to other races (see Table 1), no dummy codes were created for these two groups. Hence, these individuals were not included in the analyses of race but were included in analyses of other demographics. The results of the logistic regression are presented in Table 2.

The regression results showed that the incentive, race, sex, age, and tenure predicted whether or not someone would return their completed survey better than chance,  $\chi^2(6, N = 7,268) = 147.67$ ,  $p < .0000$ . Combined, these variables could correctly predict whether or not a survey would be returned 67.15% of the time. In addition, the results suggested that using a dollar as an incentive increased the likelihood that a person would complete the survey even after controlling for sex, age, and tenure. Also, in the regression, age and sex (marginally significant) were related to the likelihood of returning a survey.

One unexpected finding was that 1% (a total of three) of employees who received a monetary incentive actually returned the incentive with the survey. This finding may be idiosyncratic, but if this effect could be reliability replicated, it may indicate some disconfirming evidence for the reciprocity explanation for the efficacy of incentives at increasing response rates.



**Table 2**  
**Logistic Regression Results Using Incentive and Demographic Variables to Predict Whether Participants Would Respond to the Survey**

Independent Variables	<i>B</i>	<i>SE</i>	Wald	<i>df</i>	Significance	<i>R</i>	Exp( <i>B</i> )
RACE1	.43	.09	20.78	1	.00	.05	1.53
RACE2	-.25	.12	4.21	1	.04	-.02	0.77
SEX	.14	.06	6.07	1	.01	.02	1.15
AGE	.01	.00	35.79	1	.00	.06	1.01
TENURE	.00	.00	0.00	1	.95	.00	1.00
INCENTIVE	.48	.12	16.48	1	.00	.04	1.62

## Study 2: The Effects of Novelty and Incentive Size

### Method

For Study 2, employees were sent surveys with incentives, but we changed the nature of incentives employees received. Among those who received an incentive, the incentive varied in monetary value (\$.01, \$.25, \$1) and novelty level (low, high).

#### *Research Design*

The study was a 2 (low novelty, high novelty)  $\times$  3 (penny, quarter, dollar) between-subjects design where employees were randomly assigned to a group via a random numbers chart with no stratifications. In the low-novelty condition, participants either received a plain penny, a plain quarter, or a plain dollar bill in their survey packets. In the high-novelty condition, participants either received a penny with a small star sticker placed on both sides, a quarter with a small star sticker placed on both sides, or a Sacagawea golden dollar coin. Some participants did not receive any incentive in their survey packet.

#### *Procedure*

A training needs analysis was conducted for a large health care organization with facilities across the United States. A primary tool for the needs analysis was a survey distributed to a large sample of employees asking them to self-report training needs as well as their preferences for training delivery. An outside consulting firm mailed surveys, a postage-paid envelope in which to return the survey, and a photocopied signed cover letter from the most senior organizational development executive. Survey packets were sent in company envelopes to participants at their home address using the U.S. Postal Service. The cover letter printed on company letter head emphasized the importance of the study for determining what training would be provided to employees in the coming year and assured employees that their responses would be kept strictly confidential.

Each survey contained a unique six-digit number on the bottom of both sides to facilitate data entry. On surveys with incentives enclosed, a one-inch long, one-fourth-inch-wide

highlighter mark was placed within a half inch of both edges of the lower left corner of the backside of the survey. Surveys from packets with pennies in them had orange highlighter marks, surveys from packets with quarters had yellow highlighter marks, surveys from packets with paper dollars had blue highlighter marks, and surveys from packets with Sacagawea dollars had green highlighter marks. In addition, one-fourth inch of the non-highlighted corner at the bottom of the survey was cut off of all surveys with incentives. Last, researchers noted the six-digit code of all surveys containing incentives. No comment was made in the cover letter about the enclosed incentives or the markings on the surveys. Potential participants were given 21 days to return the survey from the time the surveys were mailed.

### *Survey*

An outside consulting firm used its standard training needs analysis survey as the basis for the survey content but also worked with the company's organization development staff to customize the content to address specific company needs. The survey was designed to assess the company's immediate and future training needs and was administered (and analyzed) by the outside consulting firm. The survey content covered five core training areas. These five areas included training climate, perceived training need, learning style, work attitudes, and leadership effectiveness. The survey contained 50 questions and included both multiple-choice and open-ended formats. The survey also contained three demographic questions: company tenure, educational level, and job area with fixed response options.

### *Participants*

The study started with a sample of 928 employees, who comprised all employees from three different jobs whose opinions the organization deemed as particularly important, and 4,000 employees selected at random from remaining employees, making a total sample of 4,928. Of the employees chosen to participate, three surveys were returned with the study condition unknown (they removed identifying codes from the survey), leaving a sample size of 4,925. Four thousand one hundred fifteen employees received surveys that did not include an incentive, and 810 were randomly selected to receive an incentive in their survey packet. Thus, each of the six incentive conditions included 135 employees. Of the total possible sample of paper surveys, 1,057 employees returned completed surveys yielding a total response rate of 21.5%.

To preserve the anonymity of survey respondents, the only demographics collected were company tenure, educational level, state of employment, and job area. After surveys were mailed, employee names were removed from the database. Demographic results are presented in Table 3. Respondents worked in 31 different states within the United States.

## **Results**

Survey response rates are presented in Figure 1. A chi-square analysis compared the response rates of those who did not receive an incentive (response rate = 20.8%) with those who did receive an incentive (response rate = 24.9%). Employees who received an incentive

**Table 3**  
**Sample Demographic Characteristics**

	Category	Percentage of Sample
Company Tenure	0-6 months	9.9
	6-12 months	11.0
	1-3 years	28.4
	3-5 years	15.1
	5-10 years	19.3
	More than 10 years	16.3
Educational level	Some high school	7.4
	High school diploma/GED	25.1
	Associate degree/trade school	34.3
	Bachelor's degree	23.1
	Master's degree	9.4
	Professional degree (JD, PhD, MD)	0.7
Job area	Nursing	19.4
	Administration	18.6
	Nursing assistants/aides	15.6
	Corporate/regional office	11.1
	Rehabilitation	7.8
	Maintenance/housekeeping/laundry	7.4
	Dietary services	6.1
	Business office/finance	5.1
	Other	8.7

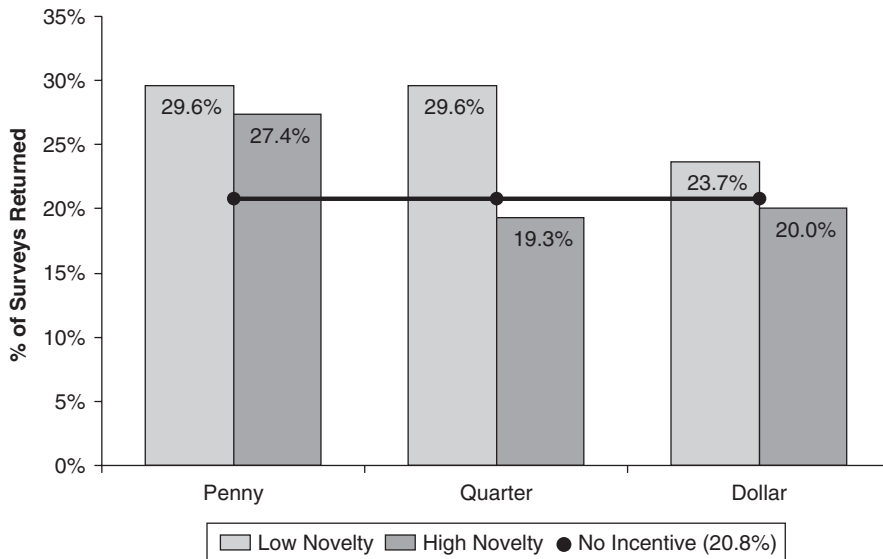
(either a penny, a quarter, or a dollar) in their survey packet were more likely to complete and return the survey than those who did not receive an incentive,  $\chi^2(1, N = 4,925) = 6.95$ ,  $p < .01$ . Thus, as with Study 1, incentives did increase response rates.

To test whether the monetary value of the incentive affected response rates, a chi-square analysis was computed among the incentive groups that compared the response rates of those who received a penny (response rate = 28.5%), a quarter (response rate = 24.4%), and a dollar (response rate = 21.9%). The monetary value of the incentives did not significantly affect response rates. Exploratory pairwise comparisons were performed using two-way chi-square analyses, and it was found that none of the pairwise group differences were significant ( $p < .05$ ). Thus, increased monetary value did not increase response rates between the groups.

To test whether incentive novelty affected response rates, a chi-square was computed that compared the response rates of those who received incentives in the low-novelty condition (response rate = 27.7%) with those who received incentives in the high-novelty condition (response rate = 22.2%) across the three monetary-value conditions. In these analyses, the novelty of the incentives did not significantly affect response rates.

Finally, a logistic regression analysis was used to test for interaction effects. Dummy coding for incentive value and novelty level was used with the Statistical Package for the Social Sciences' (SPSS) Logistic Regression command (see Pedhazur, 1997) to test for a value-by-novelty interaction. No significant interaction effect was observed.

**Figure 1**  
**Survey Response Rates Based on Novelty Level and Incentive Value**



## Discussion

These two studies respond to Roth and BeVier's (1998) request for more research on response rates in human resource management/organizational behavior (HRM/OB) settings, particularly with respect to the need for more research to understand monetary incentives in these populations. The clear conclusion from the current research is that prepaid incentives can increase response rates in company-sponsored employee surveys. From a purely practical standpoint, these data indicate that professionals wishing to increase response rates in company-sponsored employee surveys should include a cash incentive with each survey. Although incentives were found to be effective, we were surprised to find no significant differences in response rate between the different incentive size conditions in Study 2. Examined in economic terms, it seems possible that survey designers could achieve savings by choosing incentives smaller than one dollar, although these results need further investigation and replication.

These two studies should be very encouraging to practitioners who use survey data to guide organizational development efforts (cf. Waclawski & Church, 2002). The use of incentives in company-sponsored surveys provides a potentially powerful tool for increasing response rates, which could have a meaningful impact on the sufficiency of the response, and by extension, the accuracy of results. Improved accuracy could, in turn, greatly enhance the effectiveness and efficiency of organizational efforts to improve the workplace. Using incentives to increase relative response rates by 30% to 50% as was

demonstrated in these studies could easily mean the difference between results that are meaningful and those that are of questionable validity.

Among the most noteworthy findings was the fact that incentives increased response rates regardless of a number of potential suppressor variables, including race, age, sex, and company tenure. These results suggest the incentive effect observed was fairly robust with employee surveys. Although observed effects for these demographics did not moderate the effects for incentive, one important suppressor not included was employee level and employee pay. That is, might incentives be more effective with employees who are paid less, or might they be more effective with line staff than with managerial employees? Or, might there be other individual-difference variables that moderate incentives that are particular to employee populations? For example, employees who are highly intrinsically motivated for their work (e.g., knowledge workers) may not be affected by incentives (Deci & Ryan, 1991). Likewise, research on organizational commitment (e.g., O'Reilly & Chatman, 1986) suggests that incentives may be less effective with a highly committed workforce because they are less oriented toward an exchange relationship with the employer than less committed employees. Although hardly conclusive, these employee-specific individual-difference variables could explain the comments from the few respondents in the first study who returned their incentives, which seemed to indicate they were more interested in making the company a great place to work than in making an extra dollar for themselves.

One unexpected finding from the second study was that making the incentives more novel did not increase response rates. The most likely explanation for this finding is that the conditions designed to be high in novelty were actually perceived by participants to be bordering on the highly unusual or bizarre. Probably no one in the study had ever seen a penny or a quarter with a star sticker on both sides of the coin; certainly not in a survey packet with no explanation given for the incentive. Also, it is likely that many of the respondents had never seen a Sacagawea golden dollar coin (very few were in circulation at the time; in fact, we had to go to several banks to find them). Hence, it seems likely that some respondents were confused by these unusual incentives, which may have distracted them from completing the survey. Further research needs to be conducted regarding the impact of novel incentives, preferably with considerable piloting and manipulation checks for the novelty effect.

Unlike many studies in public opinion populations, we found no positive significant relationship between incentive size and response rate. These findings were inconsistent with meta-analysis results reported by Fox et al. (1988) and Hopkins and Gullikson (1993), which both found that increased incentive size was associated with increases in response rates. It is important to note, however, that the range of value for the cash incentives was different in the current research compared to Fox et al. (1988) and Hopkins and Gullikson (1993).

The reciprocity explanation for the efficacy of prepaid incentives for increasing response rates may help explain the differences in findings between these studies and those cited by Fox et al. (1988) and Hopkins and Gullikson (1993). Authors suggesting reciprocity as the underlying mechanism for prepaid incentives increasing response rates (e.g., Warriner et al., 1996) have pointed out the ineffectiveness of promised incentives compared with prepaid incentives. Also, Fox et al. (1988) found that within the range of \$0.25 to \$2.00, larger incentives are associated with larger response rates, but that further increases in incentive value have little effect on the rate of return. These findings seem to suggest that incentives tend to operate as a "small token of appreciation" that trigger a reciprocity demand. The

current findings take the reciprocity explanations offered by Fox et al. (1988) and Warriner et al. (1996) to the extreme by using a cash gift of virtually no value. These findings suggest that it may not be the value of the gift but rather the fact that a cash gift is given freely that triggers the need to reciprocate. This reciprocity mechanism may be best explained by dissonance theory as it relates to our strong desire to retain a positive self-concept (Aronson, 1969). That is, employees may see surveys as “junk mail,” but they will have an aversion to throwing money away. Once they have accepted the cash “token of appreciation” that was included with the survey (even a penny!), they feel obliged to return the favor by completing the survey in order to avoid cognitive dissonance between being an honest, fair person and their behavior of not reciprocating the survey sponsor’s gesture of goodwill.

## Limitations

These studies have several strengths, including relatively large samples, true experimental design, and the use of a live organizational survey in an applied setting. Nonetheless, several limitations should be noted. Specifically, it is possible that a diffusion effect occurred that *decreased* response rates among the control groups rather than *increasing* response rates among the incentive groups. That is, employees in the control group who observed other employees receiving incentives may have been demotivated to return the surveys. Two issues mediate this concern. First, very few employees at the same locations received surveys. One company had nearly 2,000 locations; the other had more than 30,000 employees in more than 150 very large facilities. Because participants were randomly selected, very few employees from the same locations received surveys. In the second study, surveys were mailed to employees’ homes. Finally, given the fact that the control group had such a large sample in relation to the incentive group in both studies, even the most extreme diffusion effect would have a very limited effect on the actual response rate of the control group.

Generalizability of these findings is limited in some respects. For instance, both studies used surveys of employee training needs; hence, extending these findings to other types of employee surveys (e.g., employee satisfaction, 360-degree feedback, organizational culture) would allow for more broad generalizations. It is also noteworthy that in the case of Study 2, the surveys were mailed via the U.S. Postal Service to employees’ homes, but in Study 1, the surveys were mailed to employees at work. It is possible that some of the effects observed in Study 1 were related to the fact that surveys were distributed to (and presumably completed at) the workplace, where employees completing surveys receive an indirect incentive by not working while completing the survey. Also, these results should not be assumed to generalize to the use of incentives with Internet surveys. Last, the lack of a clear manipulation check for the novelty condition severely limits interpretation of the findings related to novelty, and future research should include such checks.

## Future Research

Given the lack of research on incentives with this population, it is not surprising that these findings generate more unanswered questions. First and foremost, more work is needed to clearly understand *why* incentives are effective. Many theories have been posited

to explain these effects, but very little theory-based research exists. Although our second study sought to address this need to some degree, a better manipulation check would have been beneficial to help ensure effects that are due to novelty. Other techniques would have been helpful for explaining results as well. For example, follow-up interviewing of employees to find out why they responded or did not respond would likely have produced useful insights. A next step for this line of research among employee populations could also be to examine the impact of a monetary incentive on a more salient or less salient organizational issue. Perhaps in some organizations, employee salaries would be a more salient issue than training needs that could decrease the impact of incentives (e.g., if ceiling effects are observed without the incentives). Collecting measures of employee attitudes (e.g., organizational commitment as well as job-related intrinsic motivation) would be helpful as well.

One interesting finding from our first study indicated that despite receiving a longer survey, managers responded to the survey in higher proportions than nonmanagers. This explanation is inconsistent with Cychota and Harrison's (2002) study that found incentives were not effective with executives. Unfortunately, in our study, survey length and employee level were confounded. Yammarino, Skinner, and Childers (1991) have clearly demonstrated that longer surveys are less likely to be completed than shorter ones. Hence, our results could be due to job type differences or survey length (which is why these results were excluded from the formal analyses). Hence, it would be instructive to separate the two effects and test them separately.

One critical issue to consider involves looking beyond just the incentive and to consider the collective influence of the various approaches used to improve survey response rates. According to Dillman (1972), methods of increasing response rates are not simply additive. He suggests that no single technique should be considered in isolation but rather that the sum of techniques used combine to influence response rates. Given the evidence from the current research that incentives alone *can* contribute to increased response rates, Dillman's research would suggest that a logical next step would be to experiment with different *combinations* of methods that could collectively increase response rates with company-sponsored surveys. For example, are the effects for incentives limited to paper surveys, or might incentives also improve response rates with Internet surveys? Do incentives increase response rates only when a senior executive is the signatory on an introductory letter (as was the case in the current studies), or is it more effective to have surveys delivered with a cover letter from one's immediate supervisor?

Last, research is needed to carefully examine the impact of incentives on the reliability and validity of actual responses. For example, James and Bolstein (1990) have found that larger incentives produced longer and more positive responses to open-ended questions. Insofar as accurate sampling of opinions is the ultimate goal of any survey, it would be very useful to know if the use of prepaid incentives changes survey responses. The need for research in this area cannot be overstated.

## Conclusion

This research extends the generalizability of results from studies that used prepaid incentives to increase response rates with consumer and public policy surveys. Specifically, these



two studies demonstrate the efficacy of prepaid incentives for increasing the likelihood that employees will respond to company-sponsored surveys. These findings further establish that the value of the monetary incentive is not relevant with this population. Many questions remain with respect to the conditions under which prepaid incentives may be most effective with employees. Nonetheless, our data clearly suggest that using prepaid monetary incentives in employee surveys can dramatically reduce the costs of survey research for company-sponsored employee surveys and may significantly increase the value of these data by increasing the rate at which employees respond.

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